WEST Search History

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DATE: Thursday, January 22, 2004

Hide?	Set Name	Query	Hit Count
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☐	L9	L2 and (dry$4 or dried)	0
☐	L8	L2 and cur$4	0
☐	L7	L5 and (dry$4 or dried)	1
☐	L6	L5 and (dry$4 or cur$4)	1
☐	L5	L4 and furniture	1
☐	L4	4734302.pn.	2
☐	L3	L2 and furniture	0
☐	L2	5685523.pn.	2
		DB=PGPB,USPT,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=OR	
☐	L1	((simulated or imitation or artificial)(stone or marble)(coat$4 or surface or layer).clm. and (furniture or chair or seat or bench or toilet or counter top or bathtub or hot tub or tray))	2

END OF SEARCH HISTORY

PALM INTRANET

Day : Thursday
Date: 1/22/2004
Time: 17:47:04

Inventor Name Search Result

Your Search was:

Last Name = LIU
First Name = LAUSAN CHUNG-HSIN

Application#	Patent#	Status	Date Filed	Title	Inventor Name 1
09197518	5992929	150	11/23/1998	FOLDING COLLAPSIBLE ROCKING CHAIR	LIU , LAUSAN CHUNG-HSIN

Inventor Search Completed: No Records to Display.

Search Another: Inventor

Last Name liu **First Name** lausan chung-hsin

Search

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DATE: Thursday, January 22, 2004

Hide?	Set Name	Query	Hit Count
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☐	L30	L29 and imitation	8
☐	L29	liu.IN. and z	5171
☐	L28	L27 and catalyst	10
☐	L27	L26 and stone	285
☐	L26	liu.IN.	35782
☐	L25	L24 and hour	1
☐	L24	L23 and catalyst	2
☐	L23	4734302.pn.	2
☐	L22	L17 and catalyst	0
☐	L21	L17 and pigment	0
☐	L20	L17 and press$4	1
☐	L19	L17 and compress$4	0
☐	L18	L17 and injection	0
☐	L17	5685523.pn.	2
☐	L16	L14 and pigment	2
☐	L15	L14 and injection	0
☐	L14	4734302.pn.	2
☐	L13	L12 and (dry$4 or dried)	1
☐	L12	L11 and cur$4	2
☐	L11	L10 and (stone or marble)	2
☐	L10	4721634.pn.	2
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☐	L7	L5 and (dry$4 or dried)	1
☐	L6	L5 and (dry$4 or cur$4)	1
☐	L5	L4 and furniture	1
☐	L4	4734302.pn.	2
☐	L3	L2 and furniture	0
☐	L2	5685523.pn.	2
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☐	L1	((simulated or imitation or artificial)(stone or marble)(coat$4 or surface or layer).clm. and (furniture or chair or seat or bench or toilet or counter top or bathtub or hot tub or tray))	2

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L6: Entry 6 of 11 File: USPT Jan 18, 2000

US-PAT-NO: 6015519
DOCUMENT-IDENTIFIER: US 6015519 A

TITLE: Densified coating process and molded articles having densified outer surface

DATE-ISSUED: January 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lapikas; James S.	Sharpesville	PA		
O'Connor; John B.	Newcastle	PA		

US-CL-CURRENT: 264/74; 264/122, 264/245, 264/255, 264/257

CLAIMS:

What is claimed is:

1. A method for forming a molded article comprising the steps of preparing a densified coating material which contains a matrix-forming resin and a distribution of densifier particles, said distribution of densifier particles comprising a large densifier particle fraction, said particles of said large densifier particle fraction having an average diameter of about 35 microns to 50 microns, and a small densifier particle fraction, said particles of said small densifier particle fraction having an average diameter of from about 8 microns to about 15 microns; wherein the average diameter of the particles of said large densifier particle fraction has a ratio to the average diameter of the particles of said small densifier particle fraction of from about 6 to 1 to about 5.5 to 1; coating a surface of a mold cavity with the densified coating material; and backfilling the mold such that the densified coating material forms a surface of the molded article.

2. The method recited in claim 1, further including the step of placing a preform in the mold cavity.

3. The method recited in claim 1, wherein said matrix-forming resin is a thermosetting resin and further comprising the step of including a curing agent in said resin.

4. The method recited in claim 3, wherein said matrix-forming resin is a thermosetting polyester resin.

5. The method recited in claim 1, wherein said densified coating material includes a thixotrope.

6. The method recited in claim 1, wherein the particles of said large densifier particle fraction range from about 10 to 65 microns in diameter, said particles of said small densifier particle fraction range from about 3 to 20 microns in diameter, and wherein the average diameter of the

particles of said large densifier particle fraction has a ratio to the average diameter of the particles of said small densifier particle fraction of from about 6 to 1 to about 5.5 to 1.

7. The method recited in claim 1, wherein said particles of said large densifier particle fraction and said particles of said small densifier particle fraction are aluminum trihydrate.

8. The method recited in claim 1, wherein said densified coating material further includes a pigment.

9. The method recited in claim 1, wherein said densified coating material has a simulated stone appearance.

10. The method recited in claim 1, wherein said densified coating material is applied in a thickness of from about 80 to about 150 mils.

11. The method recited in claim 1, wherein said densified coating material further includes a diluent/cross-linking agent.

12. The method recited in claim 11, wherein said diluent/cross-linking agent is styrene monomer.

13. The method recited in claim 2, wherein said preform is a glass fiber mat.

14. The method recited in claim 1, wherein said densified coating material is applied to said mold by spraying.

15. The method recited in claim 1, wherein said molded article is selected from the group consisting of bathtubs, lavatories, hot tubs, counter tops, kitchen sinks, bar sinks and decorative furniture.

16. The method of claim 1 wherein said large densifier particle fraction comprises from about 20 weight % to about 40 weight % of the total densified coating material and said small densifier particle fraction comprises from about 20 weight % to about 40 weight % of the total densified coating material.

L10: Entry 2 of 2 File: USPT Mar 29, 1988

DOCUMENT-IDENTIFIER: US 4734302 A
TITLE: Process for forming simulated stone and resulting product

Detailed Description Text (21):
The products manufactured according to the invention are, in general, useful for most purposes for which natural stone materials are used. The products are useful for the production of walls, floors, ceilings, architectural facings, counter tops, sculpture, and many types of furniture. The surfaces produced according to this invention are superior to natural stone surfaces in many respects since they are substantially non-porous and, therefore, nonabsorbent and stain-resistant.

CLAIMS:

1. A method for producing a simulated stone surface comprising,

applying a curable synthetic resin composition to a substrate,

applying a thin coating of fine particulate material to the surface of said composition to saturate the surface of the composition with the fine particulate material such that the surface is non-tacky,

contacting said coated surface in a tamping action with an implement capable of carrying particles to ensure that said coated surface is completely covered with said fine particulate material so as to produce a surface simulating stone, and

allowing the resin composition to cure.

2. A method for producing a simulated stone surface as claimed in claim 1 wherein said fine particulate material has an average particle size between 30 and 325.

3. A method for producing a simulated stone surface as claimed in claim 2 wherein said curable synthetic resin composition includes an unsaturated polyester resin.

4. A method for producing a simulated stone surface as claimed in claim 3 wherein said curable synthetic resin composition includes a thickener.

5. A method for producing a simulated stone surface as claimed in claim 4 wherein said curable resin composition includes a filler.

6. A method for producing a simulated stone surface as claimed in claim 5 wherein said curable synthetic resin composition includes a color pigment.

7. A method for producing a simulated stone surface as claimed in claim 6 wherein said coloring agent is a gray polyester color pigment dispersion, said fine particulate material is silica, and said filler is silica aggregate and boiler slag having a particle size between about 12-40 mesh.

8. A method for producing a simulated stone surface as claimed in claim 7 wherein

said curable synthetic resin composition includes a methyl ethyl ketone peroxide catalyst.

9. A method for producing a simulated stone surface as claimed in claim 2 wherein the thin coating of fine particulate material is applied by first coating the implement with said fine particulate material and then contacting the surface with the coated implement.

10. A method for producing a simulated stone surface as claimed in claim 1 further comprising dampening said implement and contacting said dampened implement with said fine particulate material prior to contacting said surface with said implement.

11. A method for producing a simulated stone surface as claimed in claim 10 wherein the surface of said implement is cloth and said cloth surface is dampened.

12. A method for producing a simulated stone surface as claimed in claim 1 wherein a surface of said implement contacting said coated surface of said composition is dampened cloth.

13. A method for producing a simulated stone surface comprising,

applying a curable synthetic resin composition to a substrate,

applying a color pigment to the surface of said composition in a marble-like discontinuous manner,

applying a thin coating of fine particulate material to the surface of said composition to saturate the surface of the composition with the fine particulate material such that the surface is non-tacky,

contacting the surface in a tamping action with an implement capable of carrying particles to ensure that said coated surface is completely covered with said fine particulate material so as to produce a surface simulating stone, and

allowing the resin composition to cure.

15. A method for producing a simulated stone surface as claimed in claim 14 wherein said thin coating of fine particulate material is applied by first coating an applicator with said fine particulate material and then contacting the surface of said composition with said coated applicator.

16. A method for producing a simulated stone surface as claimed in claim 13 wherein said fine particulate material is talcum powder.

17. A method for producing a simulated stone surface as claimed in claim 13 further comprising dampening said implement and contacting said dampened implement with said fine particulate material prior to contacting said surface with said implement.

18. A method for producing a simulated stone surface as claimed in claim 17 wherein the surface of said implement is cloth and said cloth surface is dampened.

19. A method for producing a simulated stone surface comprising,

applying a curable synthetic resin composition to a substrate,

applying a thin coating of fine particulate material to the surface of said composition to saturate the surface of the composition with fine particulate material such that the surface is non-tacky,

coating an implement with said fine particulate material,

contacting said coated surface of said resin composition in a tamping action with said coated implement and,

allowing the tamped, coated resin composition to cure.

20. A method for producing a simulated stone surface as claimed in claim 19 wherein said implement is coated with said fine particulate material by dampening a surface of said implement and contacting said dampened surface with said fine particulate material.

21. A method for producing a simulated simulated stone surface as claimed in claim 20 wherein the surface of said implement is cloth.

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DATE: Thursday, January 22, 2004

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☐	L9	L8 and (furniture or chair or seat or bench or toilet or counter top or bathtub or hot tub or tray).clm.	1
☐	L8	(simulated or imitation or artificial)(stone or marble)(coat$4 or surface or layer).clm.	8
☐	L7	(simulated or imitation or artificial)(stone or marble)(coat$4 or surface or layer)	164
☐	L6	WO 9858994	2
☐	L5	L4 and stone	1
☐	L4	silbernagel.in.	112
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L14: Entry 3 of 4 File: DWPI Jul 30, 1998

DERWENT-ACC-NO: 1998-389154
DERWENT-WEEK: 200222

TITLE: Imitation stone slabs comprising polyurethane foam filled with natural or synthetic powdered stone - is useful for production of shower trays, window sills, floor and wall tiles, and may be bonded to layer of natural stone

INVENTOR: SILBERNAGEL, P

PATENT-ASSIGNEE: SILBERNAGEL P (SILBI)

PRIORITY-DATA: 1997DE-1026502 (June 23, 1997)

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PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	DE 19726502 C1	July 30, 1998	G	008	C08L075/04
☐	ES 2164446 T3	February 16, 2002		000	C08K003/00
☐	WO 9858994 A1	December 30, 1998	G	000	C08K003/00
☐	EP 991707 A1	April 12, 2000	G	000	C08K003/00
☐	EP 991707 B1	September 12, 2001	G	000	C08K003/00
☐	DE 59801460 G	October 18, 2001		000	C08K003/00

DESIGNATED-STATES: BR CA CN CZ JP NO US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 19726502C1	June 23, 1997	1997DE-1026502	
ES 2164446T3	June 20, 1998	1998EP-0934987	
ES 2164446T3		EP 991707	Based on
WO 9858994A1	June 20, 1998	1998WO-EP03775	
EP 991707A1	June 20, 1998	1998EP-0934987	
EP 991707A1	June 20, 1998	1998WO-EP03775	
EP 991707A1		WO 9858994	Based on
EP 991707B1	June 20, 1998	1998EP-0934987	
EP 991707B1	June 20, 1998	1998WO-EP03775	
EP 991707B1		WO 9858994	Based on

DE 59801460G	June 20, 1998	1998DE-0501460	
DE 59801460G	June 20, 1998	1998EP-0934987	
DE 59801460G	June 20, 1998	1998WO-EP03775	
DE 59801460G		EP 991707	Based on
DE 59801460G		WO 9858994	Based on

INT-CL (IPC): A47 K 3/04; A47 K 3/22; B32 B 27/06; B32 B 27/40; C04 B 26/16; C08 G 18/08; C08 J 9/00; C08 K 3/00; C08 K 3/34; C08 K 3/36; C08 K 7/18; C08 L 75/04; E04 C 2/26

ABSTRACTED-PUB-NO: DE 19726502C
BASIC-ABSTRACT:

A process for the production of imitation stone slabs or moulded articles is claimed. The polyisocyanate and/or the polyol component is premixed with 40-80 wt.% (w.r.t. the final weight of the foam) of natural and/or synthetic powdered stone having a particle size of 1-250 microns, followed by reaction and foaming of both components in a mould at 55-80 deg. C and 7-14 MPa to yield a density of 0.4-2.0 g/cm3.

Also claimed is a semi-finished product for the production of building cladding, table tops, kitchen work tops and cupboard tops and household equipment , preferably a shower tray or window sill having a natural stone layer veneer and an imitation stone layer such that the whole has a uniform appearance.

The filler material is at least partially recycled quartz powder and/or stone finings from abrasive processes and is at least partially finely ground silicate glass. The filler material is treated with adhesion promoter consisting of titalanes, silanes or glycerine and tin containing agents. The composition contains 0.5-5 wt.% organic or inorganic flame retardants, preferably phosphoric acid esters of aluminium hydroxide derivatives.

USE - The imitation stone slabs and articles are useful for shower trays, window sills, cladding and floor and wall tiles.

ADVANTAGE - The filled polyurethane foam is lighter than natural stone and has improved mechanical properties and requires only a thin layer of natural stone.

ABSTRACTED-PUB-NO: EP 991707B
EQUIVALENT-ABSTRACTS:

A process for the production of imitation stone slabs or moulded articles is claimed. The polyisocyanate and/or the polyol component is premixed with 40-80 wt.% (w.r.t. the final weight of the foam) of natural and/or synthetic powdered stone having a particle size of 1-250 microns, followed by reaction and foaming of both components in a mould at 55-80 deg. C and 7-14 MPa to yield a density of 0.4-2.0 g/cm3.

Also claimed is a semi-finished product for the production of building cladding, table tops, kitchen work tops and cupboard tops and household equipment , preferably a shower tray or window sill having a natural stone layer veneer and an imitation stone layer such that the whole has a uniform appearance.

The filler material is at least partially recycled quartz powder and/or stone finings from abrasive processes and is at least partially finely ground silicate glass. The filler material is treated with adhesion promoter consisting of

titalanes, silanes or glycerine and tin containing agents. The composition contains 0.5-5 wt.% organic or inorganic flame retardants, preferably phosphoric acid esters of aluminium hydroxide derivatives.

USE - The imitation stone slabs and articles are useful for shower trays, window sills, cladding and floor and wall tiles.

ADVANTAGE - The filled polyurethane foam is lighter than natural stone and has improved mechanical properties and requires only a thin layer of natural stone.

CHOSEN-DRAWING: Dwg.0/3

DERWENT-CLASS: A25 A93 P28 P73 Q44
CPI-CODES: A11-B06A; A12-R01; A12-S02F;

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☐	L10	L5 and (furniture or chair or table or bench or toilet or seat or counter top or sink or bathtub or hot tub).clm.	23
☐	L9	L8 and (furniture or chair or table or bench or seat or couter top ot sink or bathtub or hot tub).clm.	9
☐	L8	L4 and 427/$.ccls.	419
☐	L7	L5 and (furniture or chair or table or counter top or sink or bathtub or hot tub).clm.	16
☐	L6	L5 and (furniture or chair or table).clm.	11
☐	L5	L4 and 264/$.ccls.	464
☐	L4	(stone$ or marble$ or granite$ or rock$).clm. and (coat$4 or finish or layer or bond$4 or surfac$4).clm.	17272
☐	L3	L2 and 264/$.ccls.	1399
☐	L2	(stone$ or marble$ or granite$ or rock$) with (coat$4 or finish or layer or bond$4 or surfac$4)	80849
☐	L1	(stone or marble or granite or rock) with (coat$4 or finish or layer or bond$4)	24335

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L13: Entry 4 of 59 File: USPT Sep 3, 2002

DOCUMENT-IDENTIFIER: US 6443667 B2
TITLE: Landscaping tile

Brief Summary Text (11):
U.S. Pat. No. 3,616,103, issued to Greiner et al. on Oct. 26, 1971, is directed to a hard cementitious sheet having a simulated stone surface.

L13: Entry 5 of 59 File: USPT Aug 24, 1999

DOCUMENT-IDENTIFIER: US 5942072 A
TITLE: Process of making a decorative resilient floor covering

Brief Summary Text (10):
U.S. Pat. No. 4,959,250 discloses a process for covering a substrate with a textured simulated marble surface and the resulting product. In the process, cement and sand are mixed to form a first mixture to which is added an aqueous solution of an adhesive resin such as an acrylic resin to create a first mortar. The cement and sand are mixed to form a second mixture to which is added an aqueous solution of an adhesive resin such as an acrylic resin to create a second mortar. A contrasting pigment is added to one of the first and second mortars or to each of the mortars. The first mortar is applied over the entire substrate. The second mortar is applied onto randomly spaced portions over the previously applied first mortar prior to the complete curing of the first mortar to form a unitary textured covering. The textured unitary coating includes a lower layer and an upper layer with the upper layer comprising the second mortar and the lower layer comprising the first and second mortar. The contrasting pigment in the one of the first and second mortars is allowed to commingle with the other of the first and second mortars to enable the pigmented areas to blend with other pigmented areas, if present, and with the non-pigmented areas. Substantially only the blended upper layer of the unitary textured covering of the substrate is lightly troweled to simulate a marble surface.

Brief Summary Text (12):
U.S. Pat. No. 4,721,634 discloses a process for covering a substrate with a textured simulated marble surface by mixing cement and sand to form a first mixture to which is added an aqueous solution of acrylic resin to create a first mortar. The cement and sand are mixed to form a second mixture to which is added an aqueous solution of acrylic resin to create a second mortar. A contrasting pigment is added to one of the first and second mortars. The first mortar is applied over the entire substrate. The second mortar is applied onto randomly spaced portions over the previously applied first mortar prior to the complete curing of the first mortar to form a unitary textured covering. The textured unitary coating includes a lower layer and an upper layer with the upper layer comprising the second mortar and the lower layer comprising the first and second mortar. The contrasting pigment in the one of the first and second mortars is allowed to commingle with the other of the first and second mortars to enable the pigmented areas to blend with the non-pigmented areas. Lightly troweling substantially only the blended upper layer of the unitary textured covering of the substrate to simulate a marble surface.

Brief Summary Text (13):
U.S. Pat. No. 4,975,303 discloses a process for covering a substrate with a textured simulated marble surface and the resulting product. Cement and sand are mixed to form a first mixture to which is added an aqueous solution of an adhesive resin such as an acrylic resin to create a mortar. The mortar is spread on the substrate and one or more color pigments are added to the surface at randomly-spaced locations prior to the complete curing of the mortar. Air is blown onto the surface of the mortar and serves to blend the color pigments into the mortar and into each other. As the air stream moves across the surface of the mortar, color patterns are formed.

L13: Entry 10 of 59 File: USPT Nov 24, 1992

DOCUMENT-IDENTIFIER: US 5166230 A
TITLE: Method for producing a synthetic shaped article simulating marble, granite or the like

Brief Summary Text (3):
Simulated marble, granite or other simulated stone surfaces have become a popular building material. Articles made from these materials include architectural facings, exterior and internal wall panels, light fixtures, bathroom fixtures, counter tops, table tops, floors and other articles for which real stone is used. As compared to natural marble or granite, simulated marble or granite is less expensive, lighter, not as easily chipped, and has a greater uniformity of particle size, type and color.

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L13: Entry 14 of 59 File: USPT Sep 11, 1990

DOCUMENT-IDENTIFIER: US 4956030 A
TITLE: Method of fabricating simulated stone surfaces and improved simulated stone products

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L13: Entry 16 of 59 File: USPT Oct 31, 1989

DOCUMENT-IDENTIFIER: US 4877656 A
TITLE: Method of fabricating simulated stone surfaces and improved simulated stone product

L13: Entry 17 of 59 File: USPT Mar 29, 1988

DOCUMENT-IDENTIFIER: US 4734302 A
TITLE: Process for forming simulated stone and resulting product

CLAIMS:

1. A method for producing a simulated stone surface comprising,

applying a curable synthetic resin composition to a substrate,

applying a thin coating of fine particulate material to the surface of said composition to saturate the surface of the composition with the fine particulate material such that the surface is non-tacky,

contacting said coated surface in a tamping action with an implement capable of carrying particles to ensure that said coated surface is completely covered with said fine particulate material so as to produce a surface simulating stone, and

allowing the resin composition to cure.

2. A method for producing a simulated stone surface as claimed in claim 1 wherein said fine particulate material has an average particle size between 30 and 325.

3. A method for producing a simulated stone surface as claimed in claim 2 wherein said curable synthetic resin composition includes an unsaturated polyester resin.

4. A method for producing a simulated stone surface as claimed in claim 3 wherein said curable synthetic resin composition includes a thickener.

5. A method for producing a simulated stone surface as claimed in claim 4 wherein said curable resin composition includes a filler.

6. A method for producing a simulated stone surface as claimed in claim 5 wherein said curable synthetic resin composition includes a color pigment.

7. A method for producing a simulated stone surface as claimed in claim 6 wherein said coloring agent is a gray polyester color pigment dispersion, said fine particulate material is silica, and said filler is silica aggregate and boiler slag having a particle size between about 12-40 mesh.

8. A method for producing a simulated stone surface as claimed in claim 7 wherein said curable synthetic resin composition includes a methyl ethyl ketone peroxide catalyst.

9. A method for producing a simulated stone surface as claimed in claim 2 wherein the thin coating of fine particulate material is applied by first coating the implement with said fine particulate material and then contacting the surface with the coated implement.

10. A method for producing a simulated stone surface as claimed in claim 1 further comprising dampening said implement and contacting said dampened implement with

said fine particulate material prior to contacting said surface with said implement.

11. A method for producing a simulated stone surface as claimed in claim 10 wherein the surface of said implement is cloth and said cloth surface is dampened.

12. A method for producing a simulated stone surface as claimed in claim 1 wherein a surface of said implement contacting said coated surface of said composition is dampened cloth.

13. A method for producing a simulated stone surface comprising,

applying a curable synthetic resin composition to a substrate,

applying a color pigment to the surface of said composition in a marble-like discontinuous manner,

applying a thin coating of fine particulate material to the surface of said composition to saturate the surface of the composition with the fine particulate material such that the surface is non-tacky,

contacting the surface in a tamping action with an implement capable of carrying particles to ensure that said coated surface is completely covered with said fine particulate material so as to produce a surface simulating stone, and

allowing the resin composition to cure.

15. A method for producing a simulated stone surface as claimed in claim 14 wherein said thin coating of fine particulate material is applied by first coating an applicator with said fine particulate material and then contacting the surface of said composition with said coated applicator.

16. A method for producing a simulated stone surface as claimed in claim 13 wherein said fine particulate material is talcum powder.

17. A method for producing a simulated stone surface as claimed in claim 13 further comprising dampening said implement and contacting said dampened implement with said fine particulate material prior to contacting said surface with said implement.

18. A method for producing a simulated stone surface as claimed in claim 17 wherein the surface of said implement is cloth and said cloth surface is dampened.

19. A method for producing a simulated stone surface comprising,

applying a curable synthetic resin composition to a substrate,

applying a thin coating of fine particulate material to the surface of said composition to saturate the surface of the composition with fine particulate material such that the surface is non-tacky,

coating an implement with said fine particulate material,

contacting said coated surface of said resin composition in a tamping action with said coated implement and,

allowing the tamped, coated resin composition to cure.

20. A method for producing a simulated stone surface as claimed in claim 19 wherein said implement is coated with said fine particulate material by dampening a surface

of said implement and contacting said dampened surface with said fine particulate material.

21. A method for producing a simulated simulated stone surface as claimed in claim 20 wherein the surface of said implement is cloth.

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L14: Entry 3 of 4 File: DWPI Jul 30, 1998

DERWENT-ACC-NO: 1998-389154
DERWENT-WEEK: 200222

TITLE: Imitation stone slabs comprising polyurethane foam filled with natural or synthetic powdered stone - is useful for production of shower trays, window sills, floor and wall tiles, and may be bonded to layer of natural stone

INVENTOR: SILBERNAGEL, P

PATENT-ASSIGNEE: SILBERNAGEL P (SILBI)

PRIORITY-DATA: 1997DE-1026502 (June 23, 1997)

Search Selected Search ALL Clear

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	DE 19726502 C1	July 30, 1998	G	008	C08L075/04
☐	ES 2164446 T3	February 16, 2002		000	C08K003/00
☐	WO 9858994 A1	December 30, 1998	G	000	C08K003/00
☐	EP 991707 A1	April 12, 2000	G	000	C08K003/00
☐	EP 991707 B1	September 12, 2001	G	000	C08K003/00
☐	DE 59801460 G	October 18, 2001		000	C08K003/00

DESIGNATED-STATES: BR CA CN CZ JP NO US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 19726502C1	June 23, 1997	1997DE-1026502	
ES 2164446T3	June 20, 1998	1998EP-0934987	
ES 2164446T3		EP 991707	Based on
WO 9858994A1	June 20, 1998	1998WO-EP03775	
EP 991707A1	June 20, 1998	1998EP-0934987	
EP 991707A1	June 20, 1998	1998WO-EP03775	
EP 991707A1		WO 9858994	Based on
EP 991707B1	June 20, 1998	1998EP-0934987	
EP 991707B1	June 20, 1998	1998WO-EP03775	
EP 991707B1		WO 9858994	Based on

DE 59801460G	June 20, 1998	1998DE-0501460	
DE 59801460G	June 20, 1998	1998EP-0934987	
DE 59801460G	June 20, 1998	1998WO-EP03775	
DE 59801460G		EP 991707	Based on
DE 59801460G		WO 9858994	Based on

INT-CL (IPC): A47 K 3/04; A47 K 3/22; B32 B 27/06; B32 B 27/40; C04 B 26/16; C08 G 18/08; C08 J 9/00; C08 K 3/00; C08 K 3/34; C08 K 3/36; C08 K 7/18; C08 L 75/04; E04 C 2/26

ABSTRACTED-PUB-NO: DE 19726502C
BASIC-ABSTRACT:

A process for the production of imitation stone slabs or moulded articles is claimed. The polyisocyanate and/or the polyol component is premixed with 40-80 wt.% (w.r.t. the final weight of the foam) of natural and/or synthetic powdered stone having a particle size of 1-250 microns, followed by reaction and foaming of both components in a mould at 55-80 deg. C and 7-14 MPa to yield a density of 0.4-2.0 g/cm3.

Also claimed is a semi-finished product for the production of building cladding, table tops, kitchen work tops and cupboard tops and household equipment , preferably a shower tray or window sill having a natural stone layer veneer and an imitation stone layer such that the whole has a uniform appearance.

The filler material is at least partially recycled quartz powder and/or stone finings from abrasive processes and is at least partially finely ground silicate glass. The filler material is treated with adhesion promoter consisting of titalanes, silanes or glycerine and tin containing agents. The composition contains 0.5-5 wt.% organic or inorganic flame retardants, preferably phosphoric acid esters of aluminium hydroxide derivatives.

USE - The imitation stone slabs and articles are useful for shower trays, window sills, cladding and floor and wall tiles.

ADVANTAGE - The filled polyurethane foam is lighter than natural stone and has improved mechanical properties and requires only a thin layer of natural stone.

ABSTRACTED-PUB-NO: EP 991707B
EQUIVALENT-ABSTRACTS:

A process for the production of imitation stone slabs or moulded articles is claimed. The polyisocyanate and/or the polyol component is premixed with 40-80 wt.% (w.r.t. the final weight of the foam) of natural and/or synthetic powdered stone having a particle size of 1-250 microns, followed by reaction and foaming of both components in a mould at 55-80 deg. C and 7-14 MPa to yield a density of 0.4-2.0 g/cm3.

Also claimed is a semi-finished product for the production of building cladding, table tops, kitchen work tops and cupboard tops and household equipment , preferably a shower tray or window sill having a natural stone layer veneer and an imitation stone layer such that the whole has a uniform appearance.

The filler material is at least partially recycled quartz powder and/or stone finings from abrasive processes and is at least partially finely ground silicate glass. The filler material is treated with adhesion promoter consisting of

titalanes, silanes or glycerine and tin containing agents. The composition contains 0.5-5 wt.% organic or inorganic flame retardants, preferably phosphoric acid esters of aluminium hydroxide derivatives.

USE - The imitation stone slabs and articles are useful for shower trays, window sills, cladding and floor and wall tiles.

ADVANTAGE - The filled polyurethane foam is lighter than natural stone and has improved mechanical properties and requires only a thin layer of natural stone.

CHOSEN-DRAWING: Dwg.0/3

DERWENT-CLASS: A25 A93 P28 P73 Q44
CPI-CODES: A11-B06A; A12-R01; A12-S02F;